

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (previously presented) A process for producing a connection structure which process comprises

(1) providing

(A) a PTC device including (i) a laminar polymer PTC element and (ii) a metal foil electrode disposed on a main surface of the laminar polymer PTC element, the metal foil electrode comprising at least two metal layers, one of which, the X-th layer, having a laser beam absorption of a% that is the lowest laser beam absorption of the metal layers of the metal foil electrode, and another of which, the first layer, having a laser beam absorption of b%, where $b > a$, and being located farthest from the laminar polymer PTC element, said X-th layer being positioned between the laminar polymer PTC element and the first layer, and

(B) a metal lead element, and

(2) electrically connecting the metal foil electrode to the metal lead element by laser welding.

2. (original) The process according to Claim 1, wherein the metal foil electrode comprises two metal layers, and the X-th layer is a metal layer of the metal foil electrode which is in contact with the laminar polymer PTC element.

3. (previously presented) The process according to Claim 1, wherein the metal foil electrode comprises three metal layers, and the X-th layer is a metal layer of the metal foil electrode which is in contact with the laminar polymer PTC element, or a metal layer present between the first layer and a metal layer of the metal foil electrode which is in contact with the laminar polymer PTC element.

4. (previously presented) The process according to Claim 1, wherein the difference ($b - a$) is larger than 5%.

5. (previously presented) The process according to Claim 1, wherein the metal lead element comprises at least one metal layer, and a metal layer of the metal lead element which is in contact with the metal foil electrode has a laser beam absorption of $c\%$ which is higher than the laser beam absorption ($a\%$) of the X-th layer of the metal foil electrode.
6. (previously presented) The process according to Claim 5, wherein the difference ($c - a$) is larger than 5%.
7. (previously presented) The process according to Claim 1, wherein the laser beam is a YAG laser beam.
8. (original) The process according to Claim 7, wherein the metal foil electrode is a nickel-plated copper foil, and the metal lead element is nickel.
9. (previously presented) A connection structure produced by the process according to Claim 1.
10. (previously presented) A PTC device for use in the process according to Claim 1.
11. (original) The PTC device according to Claim 10, wherein the metal foil electrodes are disposed on both main surfaces of the laminar polymer PTC element, and at least one of the metal foil electrodes is electrically connected to the metal lead element by laser welding.
12. (previously presented) The process according to Claim 1, wherein the metal foil electrode comprises three metal layers, and the X-th layer is a metal layer of the metal foil electrode present between the first layer and a metal layer of the metal foil electrode which is in contact with the laminar polymer PTC element.